

Implicit Bias Training for Maternity Care Clinicians: Investigating Tools to Reduce Health Disparities



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Maternal Health Disparities & Implicit Bias

- The U.S. has high levels of maternal morbidity and mortality relative to its peer countries
- There are also significant and ongoing racial disparities in maternal health outcomes
- Increasing calls for implicit bias training to be implemented in maternity care
- Burden of poor outcomes falls disproportionately on Black women
- Causal factors not well understood – not explained by differences in income, education, or access



Pregnancy-Related Mortality Ratios, Centers for Disease Control & Prevention

- Increasing calls for implicit bias training to be implemented in maternity care
- National Partnership for Maternal Safety, AWHONN, Black Maternal Momnibus Act of 2021; legislation in CA, MD, MI
- There is limited evidence on effectiveness of implicit training generally, and almost no evidence for maternity care
- Some evidence that training can be effective for increasing awareness about implicit bias and concern about discrimination
- Unclear how training impacts behavior change or patient outcomes
- However, many clinicians indicate concern about health disparities and say they want more tools to combat bias and discrimination

Project Aims

- Determine the impact of implicit bias training on:
 - Nurses' **attitudes** about bias and the impacts of bias on patient care
 - Nurses' **self-efficacy** for actions that could mitigate implicit bias
 - Nurses' **use of practices** to mitigate bias, including specific strategies and behaviors
- Understand nurse perspectives on the **acceptability** of implicit bias training

Methods

- Design**
 - Pre-post educational intervention design
- Intervention**
 - 1 hour, online, self-guided implicit bias training
 - "Breaking Through Bias in Maternity Care", developed by March of Dimes
 - Surveys completed pre-training, post-training, and 6 weeks later
 - Answers confidential, de-identified
- Measurement**
 - Impacts measured using the Bias in Maternal Health Care with Attitudes Sub-Scale and Practice Sub-Scale
 - Acceptability measured using QES questionnaire



Sample Characteristics

- Mid-sized hospital in Washington, D.C
- Nurses working in Labor & Delivery, Postpartum, and Special Care Nursery units
- Nurses with direct patient care roles; excluded leadership and administrators

Demographic characteristics	(N = 40)
Gender identity, n (%)	
Male	0 (0.0)
Female	40 (100.0)
Non-binary/Third gender	0 (0.0)
Other not listed	0 (0.0)
Racial identity, n (%)	
White	13 (32.5)
Black	8 (20.0)
Asian	18 (45.0)
Hispanic, Latino or Spanish Origin	0 (0.0)
Multiracial	1 (2.5)
Primary unit	
Labor and Delivery	12 (30.0)
Postpartum	14 (35.0)
Special Care Nursery	14 (35.0)
Years of experience	
More than 15 years	19 (47.5)
10 – 15 years	8 (20.0)
5 – 10 years	10 (25.0)
3 – 5 years	3 (7.5)
1 – 3 years	0 (0.0)
Credentials	
BSN (or equivalent)	20 (52.6)
BSN with 1 or more certifications	10 (26.3)
Masters	4 (10.5)
Doctorate	1 (2.6)

Outcomes

Attitudes

- Pre vs Post**
Significant increase
Z= -2.111, p=.035, Mean Δ = +1.7
- Pre vs Follow Up**
Nonsignificant increase
Z= -1.370, p=.171, Mean Δ = +2.5

Self-Efficacy

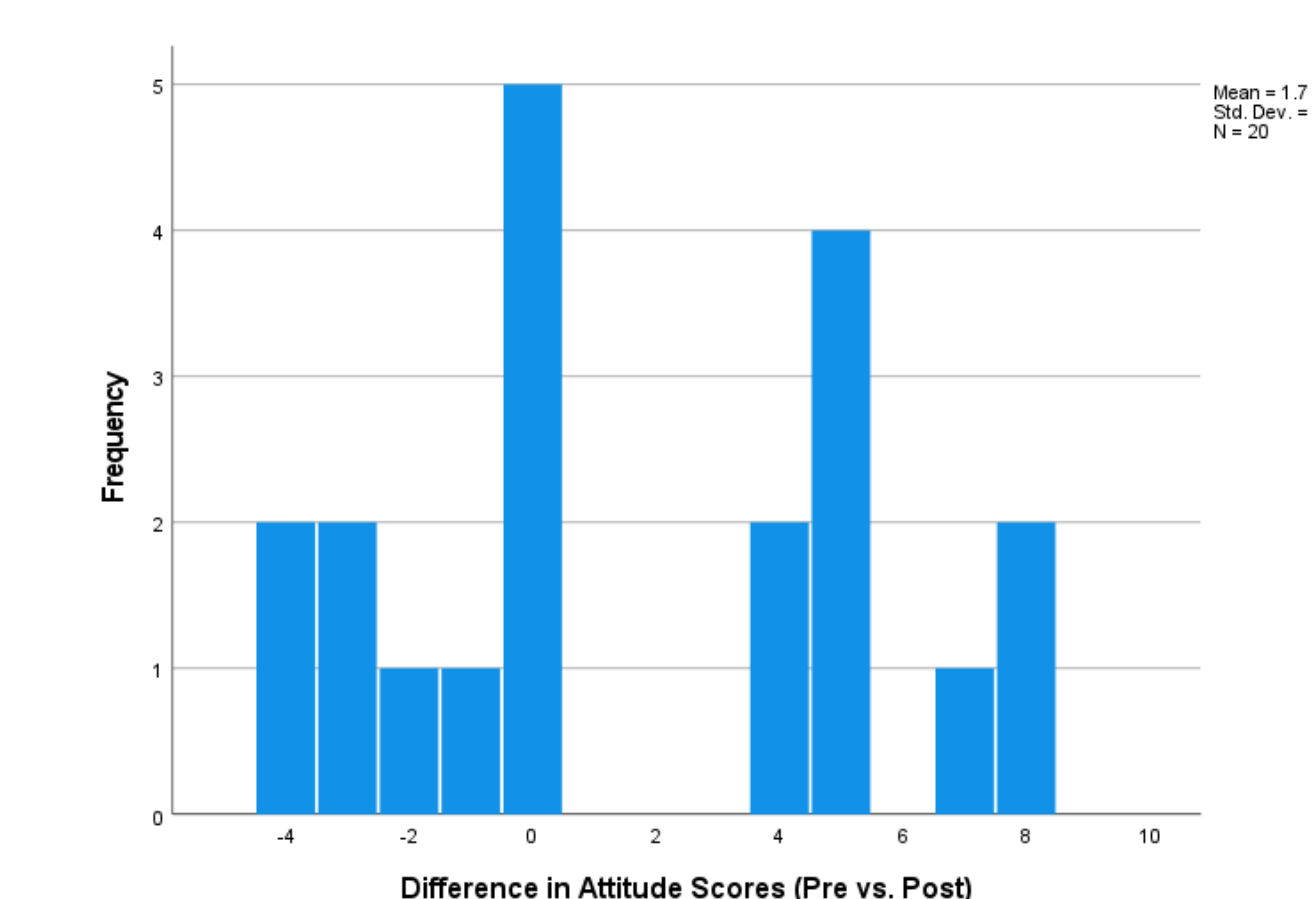
- Pre vs Post**
Nonsignificant decrease
Z= -.179, p=.858, Mean Δ = -0.20
- Pre vs Follow Up**
Nonsignificant decrease
Z= -.085, p=.932, Mean Δ = -0.1

Practices

- Pre vs Follow Up**
Nonsignificant increase
Z= -.141, p=.888, Mean Δ = +0.1

Acceptability

- All respondents felt training was relevant to their job
- Most would recommend to friend or colleague
- Most felt online training was acceptable, but felt in-person might be more useful for difficult topics
- Most felt training adequately addressed implicit bias – but felt it should be accompanied by more training in the future
- Desired topics: Impact of racism and bias on breastfeeding, more training and resources for assisting BIPOC breastfeeding mothers



Key Findings

- Significant increase in attitude scores post-intervention
- Unable to draw conclusions related to self-efficacy or practices
- Large amount of variability in responses
- Acceptability of the training was high

Correlation?

- Significant positive correlation between credentials and total score (higher level of education was associated with higher total scores)
- There was no significant correlation between total scores and racial identity, unit, or years of experience

Conclusions

- Conclusions**
 - Sample is unique among similar studies in that it includes postpartum and special care nursery RNs
 - Implicit bias training can have a positive effect on attitudes, which can potentially be sustained for at least 6 weeks
 - Training appeared to have essentially neutral effect on self-efficacy and practices, but findings were non-significant
 - Training format and content were largely acceptable to participants
 - Nurses feel that addressing issues around implicit bias and health disparities is important
- Future Considerations**
 - Different individuals can have very diverse responses to training – may need more than a one-size-fits-all approach
 - Awareness about bias is not enough on its own – clinicians need concrete tools and strategies for action
 - In-person can allow for more discussion around difficult topics, opportunities to ask questions
 - Need for increased training around the impact of implicit bias on breastfeeding success
- Limitations**
 - Small sample size, reduced statistical power
 - Unable to measure patient outcomes
 - Training could only be offered online due to safety concerns from the COVID-19 pandemic
 - Intervention coincided with the Omicron wave of the pandemic in Fall 2021, significant stress on nurses